

**TRI On-site and Off-site Releases, 1988, 1998 and 2000-2001**

	1988	1998	2000	2001	Change 1988-2001	
	Number	Number	Number	Number	Number	Percent
Total Forms	58,493	57,825	56,385	53,027	-5,466	-9.3
Form Rs	58,493	49,648	48,047	45,245	-13,248	-22.6
Form As	--	8,177	8,338	7,782	--	--
<b>On-site Releases</b>	<b>Pounds</b>	<b>Pounds</b>	<b>Pounds</b>	<b>Pounds</b>	<b>Pounds</b>	<b>Percent</b>
Total Air Emissions	2,177,827,051	1,017,486,824	802,497,247	649,457,993	-1,528,369,058	-70.2
Fugitive Air Emissions	679,531,956	307,023,499	183,630,556	156,891,800	-522,640,156	-76.9
Point Source Air Emissions	1,498,295,095	710,463,324	618,866,691	492,566,193	-1,005,728,902	-67.1
Surface Water Discharges	41,668,109	18,510,162	15,448,857	14,641,632	-27,026,477	-64.9
Underground Injection	161,907,957	114,414,728	111,099,346	94,949,272	-66,958,685	-41.4
On-site Land Releases	379,123,257	331,404,582	283,613,088	236,733,698	-142,389,559	-37.6
<b>Total On-site Releases</b>	<b>2,760,526,374</b>	<b>1,481,816,295</b>	<b>1,212,658,538</b>	<b>995,782,596</b>	<b>-1,764,743,778</b>	<b>-63.9</b>
<b>Off-site Releases</b>						
Storage Only <sup>a</sup>	13,668,594	5,147,870	7,777,575	4,858,034	-8,810,560	-64.5
Solidification/Stabilization <sup>b</sup>	26,620,239	122,645,462	132,543,685	156,874,378	130,254,139	489.3
Metal and Metal Compounds Only						
Wastewater Treatment (Excluding POTWs) <sup>c</sup>	4,521,656	2,754,133	6,666,418	6,776,955	2,255,299	49.9
Metal and Metal Compounds Only						
Transfers to POTWs <sup>d</sup>	9,373,166	3,260,012	3,021,489	2,094,688	-7,278,478	-77.7
Metal and Metal Compounds Only						
Underground Injection	8,510,253	10,184,718	19,290,244	14,968,456	6,458,203	75.9
Landfills/Surface Impoundments	243,616,951	209,442,977	224,551,703	232,942,848	-10,674,103	-4.4
Land Treatment	2,229,844	524,321	2,167,877	1,696,882	-532,962	-23.9
Other Land Disposal	9,200,093	13,089,809	7,688,229	4,486,807	-4,713,286	-51.2
Other Off-site Management	37,056,902	8,698,560	7,233,390	4,769,138	-32,287,765	-87.1
Transfers to Waste Broker for Disposal	28,335,683	12,060,273	11,453,376	8,388,361	-19,947,322	-70.4
Unknown <sup>e</sup>	10,069,918	3,344,657	3,990,447	2,085,101	-7,984,817	-79.3
<b>Total Off-site Releases</b>	<b>393,203,299</b>	<b>391,152,792</b>	<b>426,384,432</b>	<b>439,941,648</b>	<b>46,738,349</b>	<b>11.9</b>
<b>(Transfers Off-site to Disposal)</b>						
<b>Total On- and Off-site Releases</b>	<b>3,153,729,673</b>	<b>1,872,969,088</b>	<b>1,639,042,971</b>	<b>1,435,724,244</b>	<b>-1,718,005,429</b>	<b>-54.5</b>

**Note:** Does not include delisted chemicals, chemicals added in 1990, 1994 and 1995, aluminum oxide, ammonia, hydrochloric acid, PBT chemicals, sulfuric acid, vanadium and vanadium compounds. **On-site Releases** are from Section 5 of Form R. **Off-site Releases** are from Section 6 (transfers off-site to disposal) of Form R. **Off-site Releases** include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only.

<sup>a</sup> Storage only (disposal code M10) indicates that the toxic chemical is sent off-site for storage because there is no known disposal method. Amounts reported as transferred to storage only are included as a form of disposal (off-site release).

<sup>b</sup> Beginning in reporting year 1997, transfers to solidification/stabilization of metals and metal compounds (waste treatment code M41) are reported separately from transfers to solidification/stabilization of non-metal TRI chemicals (waste treatment code M40). Because this treatment method prepares a metal for disposal, but does not destroy it, such transfers are included as a form of disposal (off-site release). Reports under code M40 of metals and metal compounds have been included in solidification/stabilization of metals and metal compounds in this report.

<sup>c</sup> Beginning in reporting year 1997, transfers to wastewater treatment (excluding POTWs) of metals and metal compounds (waste treatment code M61) are reported separately from transfers to wastewater treatment of non-metal TRI chemicals (waste treatment code M60). Because wastewater treatment does not destroy metals, such transfers are included as a form of disposal (off-site release). Transfers of metals and metal compounds reported under code M60 have been included in transfers of metals and metal compounds to wastewater treatment.

<sup>d</sup> Reported as discharges to POTWs in Section 6.1 of Form R. EPA considers transfers of metals and metal compounds to POTWs as an off-site release because sewage treatment does not destroy the metal content of the waste material.

<sup>e</sup> Unknown (disposal code M99) indicates that a facility is not aware of the type of waste management used for the toxic chemical that is sent off-site. Amounts reported as unknown transfers are treated as a form of disposal (off-site release).